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Examiner: Raizen, Deborah A.

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designed for watermen, to reduce both overall light transmission and ocular photochemical

damage, available in either high-contrast blue-light blocking amber or grey coloration.

Replace paragraph 2, page 10 with the following paragraph:

It would be greatly advantageous to provide a synergistic combination of UV-absorbing

light-weight CR-39®, polarization, and dielectric mirror technology in such a way as to

maximize the benefit to watermen. Specifically, it would be advantageous to provide a

combination of: a) outer hydrophobic overcoat to protect the lens from seawater and smudging;

b) multi-layer dielectric mirror which further reduces light-transmission and glare; and c) two

layers of high-contrast ophthalmic CR-39® (plastic) having either a blue-blocking amber-tint or

color-discriminating grey tint, d) the layers of CR-39® sandwiching; a cast-in mold polarizing

layer, and arranged to provide an unsurpassed light transmission profile optimum for use on the

water in which there is 100% absorption of UVA & B light. It would also be advantageous to

provide a Rugate filter in place of or as a supplement to the foregoing dielectric mirror to even

further reduce the visible blue light as well as infrared and laser energy.

Replace paragraph 3, page 10 with the following paragraph:

It is an object of the present invention to provide a sunglass lens specially adapted for use

by watermen which adheres a multi-layer dielectric mirror to two layers of ophthalmic CR-39®

(plastic) and/or impact resistant polycarbonate sandwiching a polarizing filter. This combination

reduces both glare and overall light transmission.

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Replace paragraph 1, page 11 with the following paragraph:

It is another object to incorporate the multi-layer dielectric mirror with a CR-39® (plastic) and/or impact resistant polycarbonate lens to further decrease the transmission values of the tinted lens and yet provide outstanding durability characteristics.

Replace paragraph 2, page 11 with the following paragraph:

It is another object to provide a lens as described above which incorporates the polarizing filter between two-layers of high-contrast blue-blocking amber-tinted ophthalmic CR-39® (plastic) and/or impact resistant polycarbonate to absorb 100% of ultraviolet light and reduce visible blue light transmission to less than 0.5 %.

Replace paragraph 3, page 11 with the following paragraph:

It is another object to provide a lens as described above which incorporates the polarizing filter between two-layers of color-discriminating grey ophthalmic CR-39® (plastic) and/or impact resistant polycarbonate to absorb 100% of ultraviolet light and reduce visible blue light transmission to less than 7%.

Replace paragraph 6, page 11 (continuing to page 12) with the following paragraph:

According to the present invention, the above-described and other objects are accomplished by providing an improved ten-layer light-weight CR-39® or impact resistant polycarbonate, polarized, dielectric-mirrored lens for sunglasses. The lens includes an outer

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hydrophobic overcoat to protect the inner lens layers from seawater and smudging. Next is a six-

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layer dielectric mirror which further reduces light transmission. The mirror is bonded to two

layers of CR-39® (plastic) or impact resistant polycarbonate, in either amber or grey tint, the

foregoing layers sandwiching a polarizing filter for a total of ten layers.

Replace paragraph 9, page 13 with the following paragraph:

Disclosed is an improved ten-layer lightweight CR-39® (plastic) polarized, dielectric

mirrored sunglass that gives a light transmission profile in which 100% of UVA & B light

absorption occurs in high contrast blue-blocking amber and color-discriminating grey. Either

embodiment is optimum for use on the water.

Replace paragraph 2, page 15 with the following paragraph:

The next three lens layers 16-18 include a polarizing filter layer 17 bonded between two

lightweight CR-39® (plastic) or polycarbonate layers 16, 18.

Replace paragraph 3, page 15 with the following paragraph:

In one embodiment, high-contrast blue-blocking amber CR-39® (plastic) or

polycarbonate layers 16, 18 are specifically chosen for their dramatic glare blocking properties

which in combination with the dielectric mirror 14 yield the excellent light transmission profile

of the present invention.

Replace paragraph 4, page 15, with the following paragraph:

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In an alternate embodiment, ophthalmic grey CR-39® (plastic) or polycarbonate layers

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16. 18 are specifically chosen for their superior color-discriminating capability.

Replace paragraph 5, page 15 with the following paragraph:

Either CR-39 (plastic) or polycarbonate lens blanks may be used as both types of

materials are capable of molecular bonding, which is important for the following reasons.

Replace paragraph 1, page 16 with the following paragraph:

For the polarizing filter layer 17, there are basically two types of polarized lens

constructions, laminated and cast suspended filter. Laminated lenses are made by sandwiching

the polarized film between layers of plastic or glass, utilizing an adhesive to hold it together. The

adhesive can make the laminated lens appear hazy and the adhesion can fail when subjected to

high heat and processing forces. The CR-39® polarized lens 16 of the present invention is cast

with suspended filter and does not rely upon adhesives to hold everything together. Molecular

bonding is used to chemically join the lens layers 16-18, thus totally encapsulating the polarizing

filter layer 17 between the two CR-39® plastic lens layers 16, 18, thereby avoiding haze and

delamination.

Replace paragraph 1, page 30 (the Abstract) with the following paragraph:

An improved ten-layer performance polarized lens for sunglasses. The lens design

maximizes the benefit to watermen, giving them a combination of outer hydrophobic overcoat to

protect the lens from seawater and smudging, multi-layer dielectric mirror which further reduces